

Indiana State Teachers' Retirement Fund

Annual Actuarial Valuation

as of June 30, 2008

Nyhart

8415 Allison Pointe Boulevard
Suite 300
Indianapolis, IN 46250

www.nyhart.com

317-845-3580
800-428-7106
317-845-3655 FAX

Contact: John L. Dowell
john.dowell@nyhart.com

July 21, 2009

July 21, 2009

***The Board of Trustees
Indiana State Teachers' Retirement Fund
Indianapolis, IN***

Dear Board Members:

An actuarial valuation is prepared annually for the Indiana State Teachers' Retirement Fund. Submitted in this report are the results of the June 30, 2008 actuarial valuation.

Census Data and Asset Information

The member census data and the asset information for this valuation were furnished by the Chief Financial Officer and Staff. Their efforts and cooperation in furnishing these materials are acknowledged with appreciation. We did not audit the information provided, but we did review it thoroughly for reasonableness and compared it with the prior year's submission for consistency.

Assumptions and Methods

The actuarial assumptions used in the June 30, 2008 valuation were adopted by the Board pursuant to the Experience Study of August, 2008, which reflects the experience period from July 1, 2002 to June 30, 2007. This is a change from the assumption basis used in the June 30, 2007 valuation, which was conducted using assumptions based on the experience period from July 1, 1996 to June 30, 2002. Assumptions are summarized in the Assumptions and Methods section of this report. These assumptions and methods have been used to develop the Annual Required Contribution and are consistent with the accounting requirements detailed in GASB Statements No. 25, No. 27, and No. 50.

Funding Objective

The Indiana State Teachers' Retirement Fund Pre-1996 Account is funded on a pay-as-you-go basis from the State of Indiana.

The funding objective of the Indiana State Teachers' Retirement Fund 1996 Account is to establish and receive contributions that, when invested at the assumed rate of return, will ultimately accumulate assets over each member's working lifetime that will be sufficient to pay expected retirement allowances. As such, an employer contribution rate is calculated each year. That rate is then considered in conjunction with the goal of maintaining a relatively stable contribution over time.

Certification

We have included several schedules and exhibits in this report, including the following:

Summary of Actuarial Assumptions and Methods
Analysis of Financial Experience
Solvency Test
Schedule of Active Members' Valuation Data
Schedule of Retirants and Beneficiaries
Schedule of Funding Progress
Schedule of Employer Contributions

The valuation was completed under the supervision of a Member of the American Academy of Actuaries with significant experience in valuing employee retirement systems, and was prepared using generally accepted actuarial principles and in accordance with standards of practice prescribed by the Actuarial Standards Board. To the best of our knowledge, this report is complete and accurate and the actuarial methods and assumptions produce results that are reasonable.

Respectfully submitted,



John L. Dowell, FSA, EA, MAAA



Michael Zurek, EA, MAAA

JD/lmw

Table of Contents

Section	Page
Summary of Results	1
Assets and Liabilities	7
Calculated Contribution Rate	11
GASB Disclosures	12
Member Data	16
Payout Projections	28
Benefit Provisions	31
Assumptions and Methods	33
Financial Principles	40

Comments

Contribution Rates

The Calculated Contribution Rate section shows the calculated rate for the 1996 Account. That rate is determined as if the 1996 Account were a stand-alone plan.

Since the Pre-1996 Account is funded on a pay-as-you-go basis, only the expected benefit payments are shown in the Calculated Contribution Rate section. A similar normal cost plus UAL amortization contribution rate was calculated for the Pre-1996 Account and the two rates have been combined to determine the Annual Required Contribution shown in the GASB Disclosures section.

Plan Provisions

The ad-hoc COLA effective January 1, 2008 was included in the census information provided to us. Any additional COLA is estimated by an ongoing assumption of 1.5% annual increases in all pension payments. The minimum disability benefit was increased from \$100 to \$180 per month. We are not aware of any other changes in the plan provisions since the June 30, 2007 actuarial valuation.

Census Data

Census data for the valuation was provided by ISTRF. We have thoroughly examined the data for reasonableness and consistency with prior years, but we did not otherwise audit it.

Assumptions and Methods

Several of the actuarial assumptions used in the June 30, 2007 valuation were based on plan experience from July 1, 1996 to June 30, 2002. An updated experience study was conducted, analyzing the plan experience from July 1, 2002 to June 30, 2007. Based on the results of the study, the annual pay increase assumption, the retirement age assumption, and the withdrawal rate assumption have been revised. The mortality table assumption has also been changed to reflect a more current table.

The amortization of the unfunded accrued liability has been changed to reflect a level dollar amount over 30 years. In prior valuations, it reflected a payment that was set to be a level percent of pay over 30 years.

Investment Experience

Investment return for the year ended June 30, 2008 was lower than the assumed 7.5%. The market value rate of return was - 4.3%. Under the asset valuation method, market gains and losses are spread over a four-year period. The Market Value of Assets is currently \$470 million lower than the Actuarial Value of Assets, meaning a portion of the recent losses have not yet been recognized, but will be in the upcoming years.

Challenges

The 1996 Account has been steadily funded since its inception. As membership in that portion of the plan increases, the amount of required contributions will increase as a dollar amount, but should remain relatively stable as a percentage of covered payroll with plan experience causing gradual changes. The primary funding challenge will be for the State to meet the projected pay-as-you-go obligations as shown in the Payout Projections section for the Pre-1996 Account.

Summary of Key Valuation Results

	6/30/2008			6/30/2007
	Pre-1996 Account	1996 Account	Total	
Member Information				
Number				
Active Members	34,628	41,628	76,256	75,833
Vested Inactive Members	3,668	1,519	5,187	5,021
Nonvested Inactive Members	12,154	25,996	38,150	38,404
Retired Members and Beneficiaries	40,554	2,263	42,817	41,253
Total	91,004	71,406	162,410	160,511
Active Payroll	\$ 2,295,816,422	\$ 2,052,719,445	\$ 4,348,535,867	\$ 4,267,995,166
Annual Benefit Payments				
Annuity	\$ 84,461,904	\$ 4,353,732	\$ 88,815,636	\$ 85,068,192
Pension	616,693,332	39,128,244	655,821,576	610,241,388
Total	\$ 701,155,236	\$ 43,481,976	\$ 744,637,212	\$ 695,309,580
Assets and Liabilities				
Accrued Liability				
ASA Account Balance	\$ 2,655,159,705	\$ 647,351,802	\$ 3,302,511,507	\$ 3,458,792,329
ASA Annuities	761,914,651	45,284,646	807,199,297	793,374,281
Pension	12,375,230,146	2,265,121,792	14,640,351,938	14,563,646,325
Total	\$ 15,792,304,502	\$ 2,957,758,240	\$ 18,750,062,742	\$ 18,815,812,935
Market Value of Assets				
ASA Account Balance	\$ 2,613,138,048	\$ 649,840,170	\$ 3,262,978,218	\$ 3,672,970,117
ASA Annuities	865,006,789	34,763,819	899,770,608	931,849,453
Pension	2,166,029,159	2,235,181,351	4,401,210,510	4,375,974,429
Total	\$ 5,644,173,996	\$ 2,919,785,340	\$ 8,563,959,336	\$ 8,980,793,999
Actuarial Value of Assets				
ASA Account Balance	\$ 2,756,576,958	\$ 685,510,833	\$ 3,442,087,791	\$ 3,466,747,842
ASA Annuities	912,488,257	36,672,055	949,160,312	879,529,911
Pension	2,284,925,618	2,357,873,673	4,642,799,291	4,130,281,333
Total	\$ 5,953,990,833	\$ 3,080,056,561	\$ 9,034,047,394	\$ 8,476,559,086
Unfunded Accrued Liability				
ASA Account Balance	\$ (101,417,253)	\$ (38,159,031)	\$ (139,576,284)	\$ (7,955,513)
ASA Annuities	(150,573,606)	8,612,591	(141,961,015)	(86,155,630)
Pension	10,090,304,528	(92,751,881)	9,997,552,647	10,433,364,992
Total	\$ 9,838,313,669	\$ (122,298,321)	\$ 9,716,015,348	\$ 10,339,253,849
Funded Percentage				
ASA Account Balance	103.8%	105.9%	104.2%	100.2%
ASA Annuities	119.8%	81.0%	117.6%	110.9%
Pension	18.5%	104.1%	31.7%	28.4%
Total	37.7%	104.1%	48.2%	45.1%
Annual Costs				
Pension Normal Cost	\$ 128,733,789	\$ 102,020,810	\$ 230,754,599	
Calculated Employer Contribution Rate - 1996 Account Only				
		Fiscal 2010		Fiscal 2009
Normal Cost		4.97%		5.74%
Amortization of Unfunded Liability		(0.47%)		0.30%
Total		4.50%		6.04%
Actual Employer Contribution Rate - 1996 Account Only				
		7.00%		7.00%
Pre-1996 Account Only				
	Fiscal 2010			Fiscal 2009
Pension Benefit Payments	725,500,000			667,000,000
Pension Contributions	740,000,000			700,000,000

Unfunded Accrued Liability

Pre-1996 Account

\$ millions

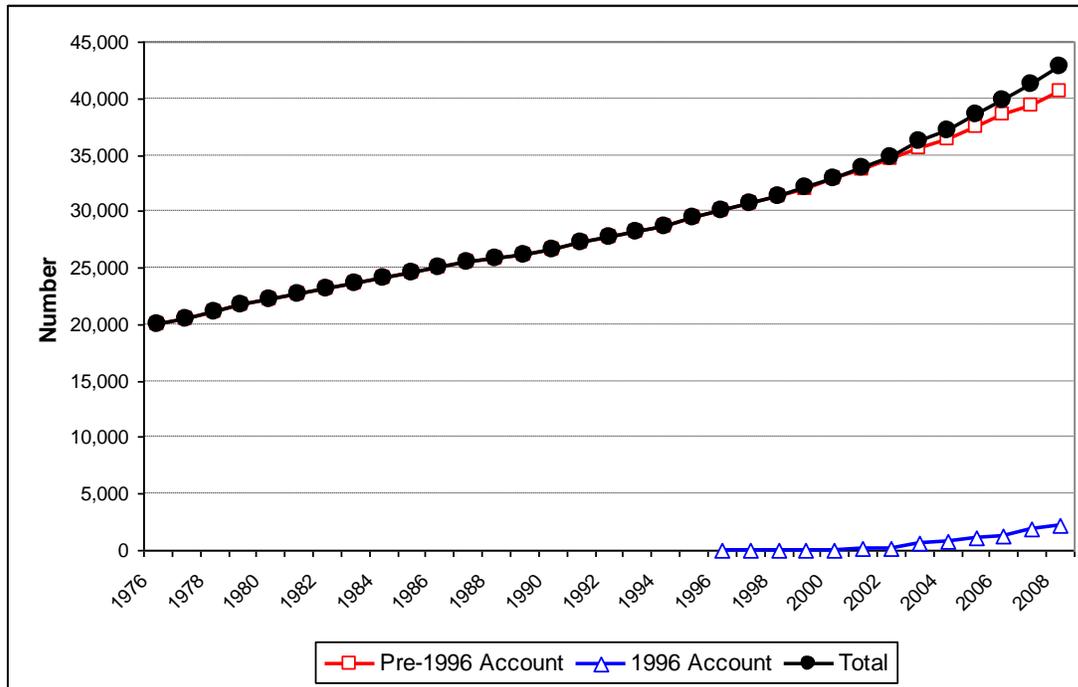
June 30	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Percentage
1975	\$ 1,570	\$ 312	\$ 1,258	19.9%
1980	2,843	539	2,304	19.0%
1985	4,023	1,073	2,950	26.7%
1991	7,182	2,161	5,021	30.1%
1992	7,949	2,376	5,573	29.9%
1993	8,508	2,592	5,916	30.5%
1994	9,087	2,809	6,278	30.9%
1995	9,675	2,984	6,691	30.8%
1996	10,283	3,242	7,041	31.5%
1997	10,868	3,678	7,190	33.8%
1998	11,481	4,130	7,351	36.0%
1999	12,173	4,731	7,442	38.9%
2000	12,409	5,210	7,199	42.0%
2001	12,696	5,363	7,333	42.2%
2002	13,498	5,555	7,943	41.2%
2003	13,355	5,728	7,627	42.9%
2004	13,549	5,765	7,784	42.5%
2005	14,254	5,797	8,457	40.7%
2006	15,003	5,478	9,525	36.5%
2007	15,988	5,764	10,224	36.1%
2008	15,792	5,954	9,838	37.7%

1996 Account

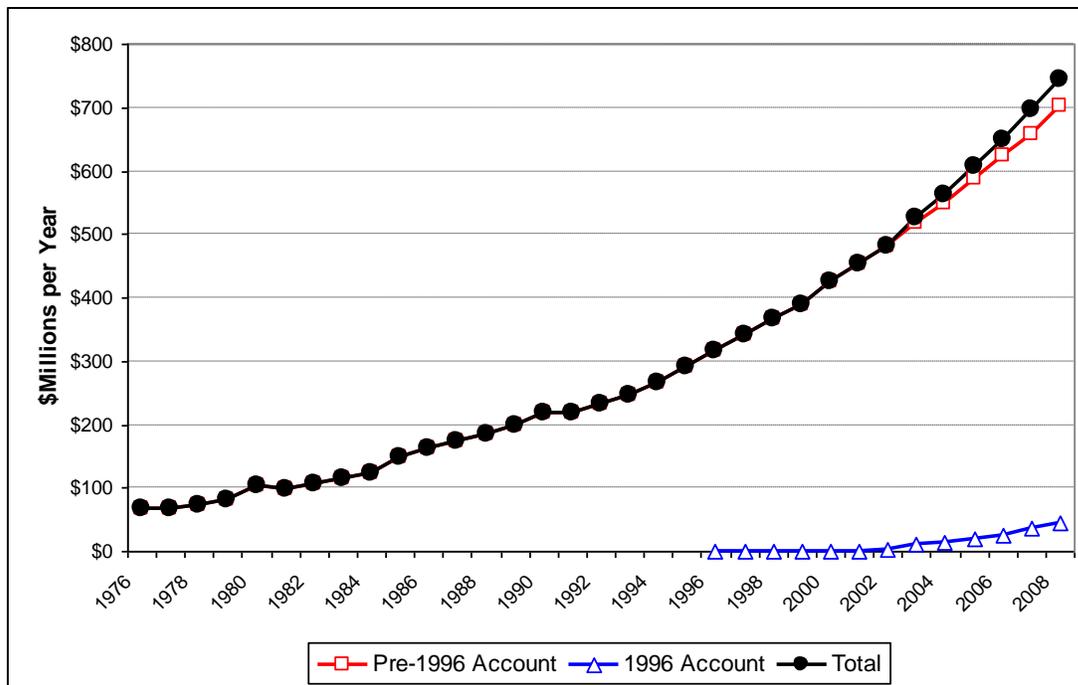
\$ millions

June 30	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Percentage
1996	\$ 48	\$ 21	\$ 27	43.8%
1997	176	72	104	40.9%
1998	298	136	162	45.6%
1999	498	240	258	48.2%
2000	706	368	338	52.1%
2001	828	447	381	54.0%
2002	1,167	621	546	53.2%
2003	1,392	826	566	59.3%
2004	1,649	1,039	610	63.0%
2005	2,011	1,268	743	63.1%
2006	2,363	2,209	154	93.5%
2007	2,828	2,713	115	95.9%
2008	2,958	3,080	(122)	104.1%

Retired Members and Beneficiaries Receiving Benefits



Total Retirement Allowances Being Paid



Active Member Data

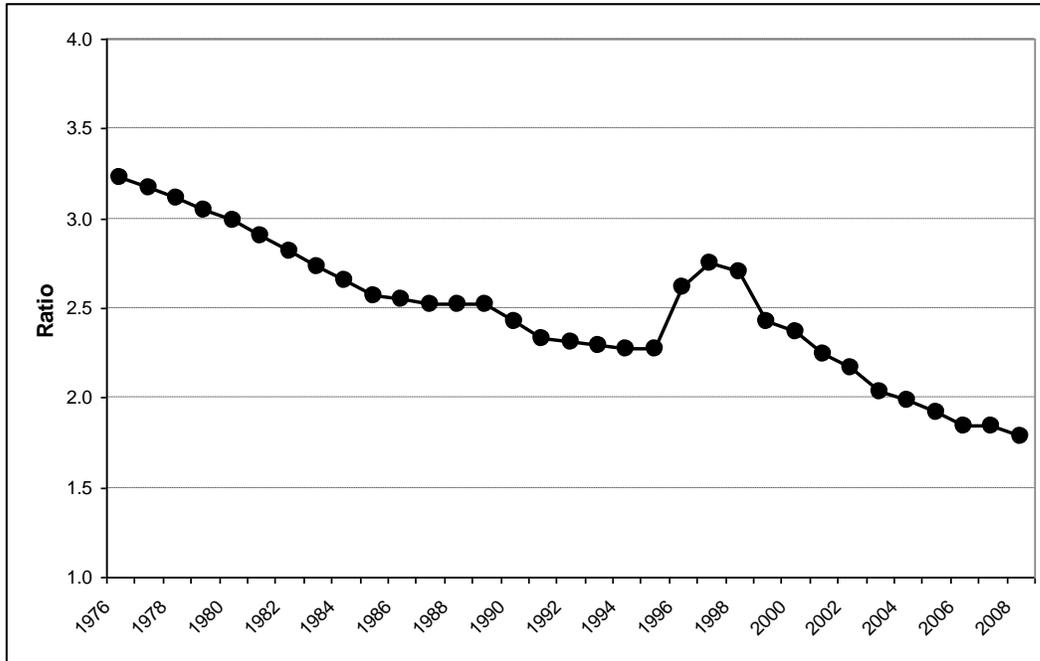
Pre-1996 Account

June 30	Number	Valuation Payroll (\$000s)	Average			Pay Increase %
			Age	Service	Pay	
1975	63,932	\$ 749,200	38.7	10.9	\$ 11,719	
1980	66,575	1,107,699	39.7	11.9	16,638	
1985	62,932	1,519,887	41.5	14.2	24,151	
1987	64,157	1,751,709	42.0	14.5	27,303	
1989	65,986	2,044,797	42.6	14.9	30,988	
1991	63,373	2,278,715	43.0	15.4	35,957	
1992	63,980	2,416,263	43.8	16.0	37,766	5.0%
1993	64,594	2,536,165	44.0	16.1	39,263	4.0
1994	65,209	2,614,915	44.1	16.2	40,101	2.1
1995	66,542	2,728,811	44.2	16.2	41,009	2.3
1996	70,183	2,805,823	44.2	15.7	39,979	(2.5)
1997	63,520	2,739,436	45.4	16.9	43,127	7.9
1998	59,030	2,699,183	46.4	18.0	45,726	6.0
1999	56,560	2,755,489	47.4	19.3	48,718	6.5
2000	52,920	2,561,533	48.2	20.1	48,404	(0.6)
2001	50,802	2,564,451	48.7	20.7	50,479	4.3
2002	47,510	2,604,956	49.4	21.5	54,830	8.6
2003	43,705	2,448,271	49.6	21.7	56,018	2.2
2004	41,510	2,384,480	50.1	22.2	57,444	2.5
2005	39,097	2,305,726	50.6	22.7	58,974	2.7
2006	36,994	2,237,380	51.1	23.2	60,480	2.6
2007	36,526	2,376,390	52.1	23.8	65,060	7.6
2008	34,628	2,295,816	52.5	24.6	66,299	1.9

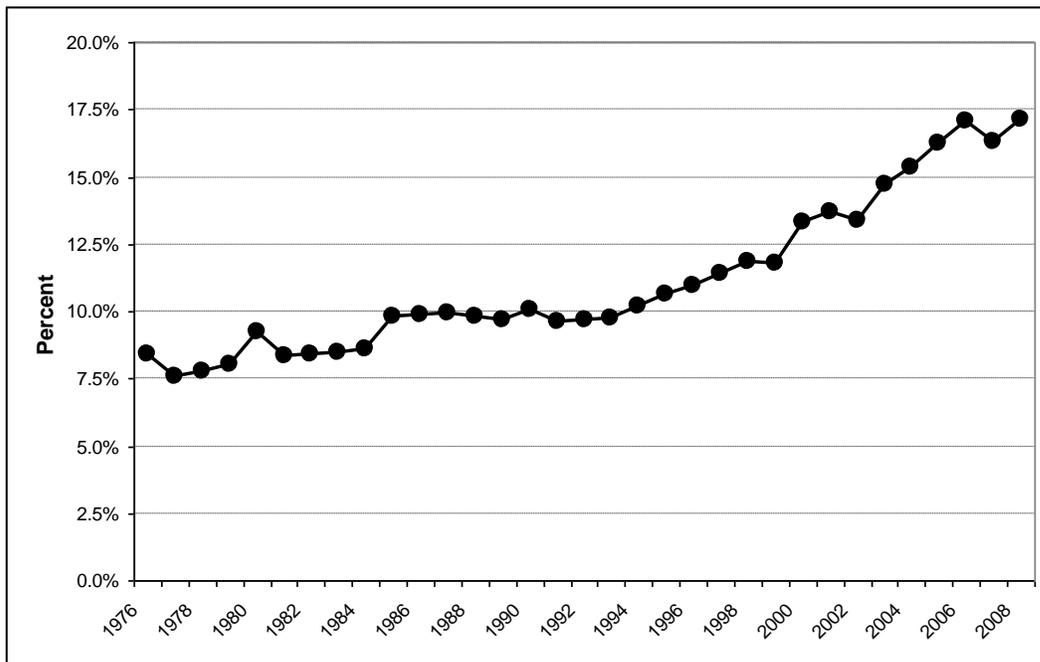
1996 Account

June 30	Number	Valuation Payroll (\$000s)	Average			Pay Increase %
			Age	Service	Pay	
1996	8,683	\$ 72,506	32.2	1.3	\$ 8,350	
1997	20,686	245,168	33.0	1.8	11,852	41.9%
1998	25,634	395,758	33.6	2.2	15,439	30.3
1999	21,185	538,837	35.3	4.0	25,435	64.7
2000	24,950	631,072	36.4	4.7	25,293	(0.6)
2001	24,846	754,426	36.3	5.5	30,364	20.0
2002	27,873	1,004,515	36.7	6.1	36,039	18.7
2003	29,936	1,136,864	37.0	6.5	37,976	5.4
2004	32,000	1,267,173	37.3	6.9	39,599	4.3
2005	34,826	1,428,604	37.5	7.2	41,021	3.6
2006	36,356	1,565,341	37.7	7.5	43,056	5.0
2007	39,307	1,891,605	38.2	7.8	48,124	11.8
2008	41,628	2,052,719	38.1	8.2	49,311	2.5

Active Members per Retired Life



Total Retirement Allowances as a Percent of Valuation Payroll



Reconciliation of Market Value of Assets

	<u>6/30/2007 thru 6/30/2008</u>	<u>6/30/2006 thru 6/30/2007</u>
Market Value, beginning of year	\$ 8,980,793,999	\$ 7,791,423,831
Member Contributions	123,927,759	126,194,680
Employer Contributions	808,128,686	753,039,657
Benefit Payments	(961,318,453)	(910,577,681)
Transfers	<u>427,334</u>	<u>3,803,697</u>
Non-Investment Net Cash Flow	\$ (28,834,674)	\$ (27,539,647)
Plan Expenses	\$ (6,780,055)	\$ (6,521,555)
Investment Return	<u>(381,219,934)</u>	<u>1,223,431,370</u>
Net Investment Return	\$ (387,999,989)	\$ 1,216,909,815
Market Value, end of year	\$ 8,563,959,336	\$ 8,980,793,999
Market Value Net Rate of Return	(4.3%)	15.7%

Development of the Actuarial Value of Assets

	<u>6/30/2007 thru 6/30/2008</u>
1. Actuarial Value, beginning of year	\$ 8,476,559,086
2. Market Value, beginning of year	8,980,793,999
3. Market Value, end of year	8,563,959,336
4. Non-Investment Net Cash Flow	(28,834,674)
5. Net Investment Return	
a. Expected [.075 x ((2)+0.5(4))]	672,478,250
b. Actual [(3) - (2) - (4)]	<u>(387,999,989)</u>
6. Current Year Market Value Gain/(Loss) [(5b) - (5a)]	\$ (1,060,478,239)
7. Deferred Recognition of Investment Gain/(Loss)	
a. Fiscal 2008 (75% of (6))	\$ (795,358,679)
b. Fiscal 2007 (50%)	316,792,882
c. Fiscal 2006 (25%)	<u>8,477,739</u>
d. Total [(a) + (b) + (c)]	\$ (470,088,058)
8. Preliminary Actuarial Value, end of year [(3) - (7d)]	9,034,047,394
a. 80% of Market Value, end of year [80% of (3)]	6,851,167,469
b. 120% of Market Value, end of year [120% of (3)]	10,276,751,203
9. Actuarial Value, end of year [(8), but not Greater than 8(b), nor Less than (8a)]	\$ 9,034,047,394
10. Actuarial Value as a % of Market Value [(9) / (3)]	105.4891%
11. Net Investment Return on Actuarial Value [(9) - (1) - (4)]	\$ 586,322,982
12. Actuarial Value Net Rate of Return [(11) / ((1) + 0.5(4))]	6.9%

Asset and Liability Allocation

Market Value of Assets Allocation

	Pre-1996 Account	1996 Account	Total
Member			
Active and Inactive	\$ 2,613,138,048	\$ 649,840,170	\$ 3,262,978,218
Retired	<u>865,006,789</u>	<u>34,763,819</u>	<u>899,770,608</u>
Total Member	\$ 3,478,144,837	\$ 684,603,989	\$ 4,162,748,826
Employer			
Active and Inactive	\$ 0	\$ 1,845,249,537	\$ 1,845,249,537
Retired			
Pension Stabilization Fund	\$ 2,084,401,712	\$ 0	\$ 2,084,401,712
Other	<u>81,627,447</u>	<u>389,931,814</u>	<u>471,559,261</u>
Total	\$ 2,166,029,159	\$ 389,931,814	\$ 2,555,960,973
Total Employer	\$ 2,166,029,159	\$ 2,235,181,351	\$ 4,401,210,510
Total	\$ 5,644,173,996	\$ 2,919,785,340	\$ 8,563,959,336

Unfunded Accrued Liability Allocation

	Pre-1996 Account	1996 Account	Total
Retired Members and Beneficiaries			
ASA Balances and Annuities	\$ 1,004,129,350	\$ 71,598,793	\$ 1,075,728,143
Pension Accrued Liability	6,240,293,070	443,334,298	6,683,627,368
Actuarial Value of Assets*	<u>3,197,413,875</u>	<u>448,007,788</u>	<u>3,645,421,663</u>
Unfunded Accrued Liability	\$ 4,047,008,545	\$ 66,925,303	\$ 4,113,933,848
Active and Inactive Members			
ASA Balances	\$ 2,412,945,006	\$ 621,037,655	\$ 3,033,982,661
Pension Accrued Liability	6,134,937,076	1,821,787,494	7,956,724,570
Actuarial Value of Assets*	<u>2,756,576,958</u>	<u>2,632,048,773</u>	<u>5,388,625,731</u>
Unfunded Accrued Liability	\$ 5,791,305,124	\$ (189,223,624)	\$ 5,602,081,500
Total			
ASA Balances and Annuities	\$ 3,417,074,356	\$ 692,636,448	\$ 4,109,710,804
Pension Accrued Liability	12,375,230,146	2,265,121,792	14,640,351,938
Actuarial Value of Assets*	<u>5,953,990,833</u>	<u>3,080,056,561</u>	<u>9,034,047,394</u>
Unfunded Accrued Liability	\$ 9,838,313,669	\$ (122,298,321)	\$ 9,716,015,348

* Actuarial Value of Assets is 105.4891% of Market Value of Assets and is allocated between actives/retirees and Pre-96/Post-96 in same proportion as Market Value shown above.

Analysis of Financial Experience

	Pre-1996 Account	1996 Account	Total Fund
6/30/2007 Unfunded Accrued Liability	\$ 10,224	\$ 115	\$ 10,339
2007 – 2008 Investment (gain)/loss	45	3	48
Demographic experience / 2008 data	(274)	(36)	(310)
New Entrants	155	14	169
Miscellaneous Other*	238	9	247
Actuarial Assumption Changes			
<i>Salary Scale</i>	\$ (203)	\$ (185)	\$ (388)
<i>Turnover</i>	(25)	(7)	(32)
<i>Retirement</i>	113	21	134
<i>Mortality</i>	<u>(435)</u>	<u>(56)</u>	<u>(491)</u>
Total	<u>(550)</u>	<u>(227)</u>	<u>(777)</u>
Net Change	\$ (386)	\$ (237)	\$ (623)
6/30/2008 Unfunded Accrued Liability	\$ 9,838	\$ (122)	\$ 9,716

* *Miscellaneous Other includes changes due to increases for benefit increases and expected net interest on assets and liabilities, offset by decreases for contributions.*

Calculated Employer Contribution Rate

1996 Account

	6/30/2008	% of Projected Payroll for Fiscal 2009	Projected Employer Contribution for Fiscal 2010
Normal Cost	\$ 102,020,810	4.97%	
Amortization of Unfunded Accrued Liability			
Unfunded Accrued Liability	\$ (122,298,321)		
Amortization Factor (30-years, level dollar)	12.6962		
Amortization Payment	\$ (9,632,671)	(0.47%)	
Calculated Employer Contribution Rate	\$ 92,388,139	4.50%	\$ 102,000,000

- The dollar contribution, based on calculated rates, is a projection to the 2010 fiscal year at a 10.0% payroll growth rate assumption for the 1996 Account and is provided for illustrative purposes.
- The calculated contribution rate for the 1996 Account is determined as if it were a stand-alone plan.

Pre-1996 Account

Expected Pension Benefit Payments	\$ 667,000,000	\$ 725,500,000
-----------------------------------	-----------------------	-----------------------

- The Pre-1996 Account is funded on a pay-as-you-go basis. The figures shown above reflect the expected pension payments to be made during fiscal year 2009 and fiscal year 2010.
- Although not shown here, a Pre-1996 Account normal cost plus a 30-year, level-dollar UAL amortization was calculated and has been reflected in the Annual Required Contribution shown in the GASB Disclosures section.

GASB Statements No. 25 and No. 27

Required Supplementary Information

Under the Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 27, certain information about the plan is required to be disclosed. The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	June 30, 2008
Actuarial Cost Method	Entry Age Actuarial Cost Method
Amortization Method	Level Dollar
Amortization Period	30 Years
Asset Valuation Method	4-Year Smoothed Market Value with Corridor
Actuarial Assumptions:	
Investment Rate of Return	7.50%
Projected Pay Increases	3.50 – 12.50% (includes 3.25% wage inflation)
Cost-of-Living Adjustments	1.5% Compounded Annually on Pension Portion

Membership in the plan consisted of the following at June 30, 2008, the date of the latest actuarial valuation:

	<u>2008</u>
Retired Members and Beneficiaries Receiving Benefits	42,817
Terminated Plan Members Entitled to but Not Yet Receiving Benefits	
Vested	5,187
Nonvested	38,150
Active Plan Members	<u>76,256</u>
Total	162,410

GASB Statements No. 25 and No. 27

Required Supplementary Information

Schedule of Funding Progress

Valuation Date June 30	Actuarial Value of Assets (a)	Entry Age Accrued Liability (b)	Unfunded Accrued Liability (UAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAL as a % of Covered Payroll [(b) - (a)] / (c)
1996	\$ 3,262,619,379	\$ 10,330,788,316	\$ 7,068,168,937	31.6%	\$ 2,878,329,486	245.6%
1997	3,750,138,439	11,044,660,156	7,294,521,717	34.0	2,984,603,913	244.4
1998	4,266,312,063	11,780,174,095	7,513,862,032	36.2	3,094,940,606	242.8
1999	4,970,720,334	12,670,924,443	7,700,204,109	39.2	3,294,326,130	233.7
2000	5,578,046,785	13,115,065,443	7,537,018,658	42.5	3,192,604,492	236.1
2001	5,810,759,564	13,523,825,973	7,713,066,409	43.0	3,318,877,027	232.4
2002	6,176,574,529	14,664,661,236	8,488,086,707	42.1	3,609,470,436	235.2
2003	6,554,364,927	14,747,339,056	8,192,974,129	44.4	3,585,134,913	228.5
2004	6,804,394,627	15,197,925,988	8,393,531,361	44.8	3,651,653,125	229.9
2005	7,065,299,476	16,264,893,444	9,199,593,968	43.4	3,734,329,113	246.4
2006	7,686,688,965	17,365,572,132	9,678,883,167	44.3	3,802,721,221	254.5
2007	8,476,559,086	18,815,812,935	10,339,253,849	45.1	4,267,995,166	242.3
2008	9,034,047,394	18,750,062,742	9,716,015,348	48.2	4,348,535,867	223.4

Schedule of Employer Contributions

Fiscal Year Ending	Valuation Date June 30	Annual Required Contribution	Actual Employer Contribution	Percentage Contributed
1998	1996	\$ 508,940,065	\$ 465,350,488	91.4%
1999	1997	508,259,679	612,349,218	120.5
2000	1998	524,815,537	647,441,260	123.4
2001	1999	547,532,673	689,219,756	125.9
2002	2000	537,789,669	566,226,658	105.3
2003	2001	572,226,197	602,231,775	105.2
2004	2002	638,541,074	438,180,343	68.6
2005	2003	619,186,005	484,778,888	78.3
2006	2004	672,555,533	701,340,085	104.3
2007	2005	742,882,002	753,039,657	101.4
2008	2006	800,059,308	808,128,686	101.0
2009	2007	819,638,258		
2010	2008	952,120,349		

GASB Statements No. 25 and No. 27

Statement of Plan Net Assets

Assets

Cash and Cash Equivalents	\$ 811,941,046
Securities Lending Collateral	1,217,423,196
Receivables	
Employer Contributions	\$ 38,103,125
Due from PERF	2,463,722
Member Contributions	32,837,193
Due from Lottery Commission	0
Securities Sold	1,873,893,088
Interest and Dividends	<u>30,137,923</u>
Total Receivables	\$ 1,977,435,051
Investments	
Equity Securities	\$ 3,995,986,203
Debt Securities	2,859,697,399
Other	<u>681,790,416</u>
Total Investments	\$ 7,537,474,018
Furniture and Equipment	791
Insurance Premium Paid in Advance	0
Other	<u>(139,847)</u>
Total Assets	\$ 11,544,134,255

Liabilities

Accrued Benefits Payable	\$ 0
Accrued Wages Payable	163,696
Accrued Liability for Compensated Absences - Current	71,011
Accounts Payable	6,516,707
Due to PERF	0
Securities Lending Collateral	1,217,423,196
Payables for Securities Purchased	<u>1,755,939,818</u>
Total Current Liabilities	\$ 2,980,114,428
Accrued Liability for Compensated Absences - Long-Term	<u>60,491</u>
Total Liabilities	\$ <u>2,980,174,919</u>

Net Assets Held in Trust for Pension Benefits **\$ 8,563,959,336**

GASB Statements No. 25 and No. 27

Statement of Changes in Plan Net Assets

	6/30/2007 thru 6/30/2008
Net Assets at Beginning of Year	\$ 8,980,793,999
Additions	
Contributions	
Member Contributions	\$ 123,927,759
Employer Contributions	778,128,686
Employer Contributions - Pension Stabilization	<u>30,000,000</u>
Total Contributions	\$ 932,056,445
Investments	
Net Appreciation (Depreciation) in Fair Value	\$ (667,757,343)
Interest Income	204,180,815
Dividend Income	102,697,555
Securities Lending Income	53,553,120
Less Investment Expense	
Investment Fees	(27,537,095)
Securities Lending Fees	(46,217,139)
Other	<u>(139,847)</u>
Net Investment Income	\$ (381,219,934)
Other Additions	
Net Transfers from Other Retirement Funds	\$ 427,334
Annuity and Disability Refunds	0
Outdated Benefit Checks	0
Reimbursement of Administrative Expense	<u>0</u>
Total Other Additions	<u>\$ 427,334</u>
Total Additions	\$ 551,263,845
Deductions	
Annuity and Disability Benefits	\$ 950,855,458
Voluntary and Death Withdrawals	10,462,995
Claims on Outdated Benefit Checks	0
Administrative Expenses	5,949,887
Capital Projects	821,399
Depreciation Expenses	8,769
Transfer to Other Retirement Funds	<u>0</u>
Total Deductions	<u>\$ 968,098,508</u>
Change in Net Assets Held in Trust for Pension Benefits	\$ (416,834,663)
Net Assets at End of Year	\$ 8,563,959,336

Member Data

The tables below summarize the member data used in the valuation. The pages that follow show various distributions of the member groups.

Pre-1996 Account

	Males	Females	Total
Number of Actives	9,052	25,576	34,628
- Average Age	53.2	52.2	52.5
- Average Service	26.9	23.7	24.6
- Average Pay	\$ 71,613	\$ 64,419	\$ 66,299
Number of Vested Inactives	859	2,809	3,668
- Average Age	55.9	55.9	55.9
- Average Service	17.7	16.2	16.6
Number of Nonvested Inactives	2,770	9,384	12,154
Number of Retirees and Beneficiaries	14,550	26,004	40,554
- Average Age	71.2	72.6	72.1
- Average Years Retired	11.2	12.5	12.0
- Average Monthly Annuity	\$ 204	\$ 157	\$ 174
- Average Monthly Pension	\$ 1,458	\$ 1,161	\$ 1,267
Total Number of Members	27,231	63,773	91,004

1996 Account

	Males	Females	Total
Number of Actives	11,450	30,178	41,628
- Average Age	38.4	38.0	38.1
- Average Service	9.1	7.8	8.2
- Average Pay	\$ 55,272	\$ 47,049	\$ 49,311
Number of Vested Inactives	440	1,079	1,519
- Average Age	48.3	50.3	49.7
- Average Service	15.0	14.0	14.3
Number of Nonvested Inactives	7,027	18,969	25,996
Number of Retirees and Beneficiaries	915	1,348	2,263
- Average Age	64.9	65.3	65.1
- Average Years Retired	5.3	5.3	5.3
- Average Monthly Annuity	\$ 187	\$ 142	\$ 160
- Average Monthly Pension	\$ 1,667	\$ 1,287	\$ 1,441
Total Number of Members	19,832	51,574	71,406

Total

	Males	Females	Total
Number of Actives	20,502	55,754	76,256
- Average Age	44.9	44.5	44.6
- Average Service	17.0	15.1	15.6
- Average Pay	\$ 62,487	\$ 55,017	\$ 57,025
Number of Vested Inactives	1,299	3,888	5,187
- Average Age	53.3	54.3	54.0
- Average Service	16.8	15.6	15.9
Number of Nonvested Inactives	9,797	28,353	38,150
Number of Retirees and Beneficiaries	15,465	27,352	42,817
- Average Age	70.8	72.2	71.7
- Average Years Retired	10.8	12.2	11.7
- Average Monthly Annuity	\$ 203	\$ 156	\$ 173
- Average Monthly Pension	\$ 1,470	\$ 1,167	\$ 1,276
Total Number of Members	47,063	115,347	162,410

Active Members: Pre-1996 Account

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19	-	-	-	-	-	-	-	-
20-24	96	-	-	-	-	-	-	96
25-29	298	110	-	-	-	-	-	408
30-34	115	249	94	1	-	-	-	459
35-39	148	157	1,047	825	3	1	-	2,181
40-44	144	118	451	1,753	956	5	1	3,428
45-49	94	106	321	894	2,398	919	10	4,742
50-54	67	97	350	958	1,318	2,477	2,271	7,538
55-59	51	78	307	921	1,434	1,464	5,938	10,193
60-64	21	33	103	386	673	607	2,829	4,652
65-69	3	12	29	58	78	86	554	820
70-74	2	8	5	7	3	8	50	83
75-79	1	1	4	3	-	1	9	19
80 & Over	-	-	1	1	-	-	7	9
Totals	1,040	969	2,712	5,807	6,863	5,568	11,669	34,628

Average Age: 52.5
Average Service: 24.6

Active Members: 1996 Account

By Attained Age and Years of Service

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19	3	-	-	-	-	-	-	3
20-24	2,183	2	-	-	-	-	-	2,185
25-29	6,518	2,643	1	-	-	-	-	9,162
30-34	2,065	4,864	1,653	3	-	-	-	8,585
35-39	1,275	1,841	3,040	398	3	-	-	6,557
40-44	985	1,211	1,151	731	201	4	2	4,285
45-49	785	1,024	981	398	414	144	2	3,748
50-54	507	727	923	398	257	285	168	3,265
55-59	325	487	664	354	244	158	358	2,590
60-64	136	185	221	150	95	58	154	999
65-69	38	51	44	17	9	9	13	181
70-74	25	14	8	2	-	-	-	49
75-79	9	4	1	-	1	-	-	15
80 & Over	2	1	-	-	-	1	-	4
Totals	14,856	13,054	8,687	2,451	1,224	659	697	41,628

Average Age: 38.1
Average Service: 8.2

Inactive Vested Members: Pre-1996 Account

By Attained Age and Years of Service

Attained Age	Years of Service at Termination							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
30-34	-	-	2	-	-	-	-	2
35-39	-	-	139	11	-	-	-	150
40-44	-	-	234	80	13	-	-	327
45-49	-	-	237	137	78	6	3	461
50-54	-	-	309	197	137	80	38	761
55-59	-	-	416	300	192	114	69	1,091
60-64	-	-	344	96	66	34	54	594
65-69	-	-	59	18	9	7	15	108
70-74	-	-	15	2	-	4	3	24
75-79	-	-	7	1	-	-	1	9
80 & Over	-	-	121	13	5	-	2	141
Totals	-	-	1,883	855	500	245	185	3,668

Average Age: 55.9
Average Service: 16.6

Inactive Vested Members: 1996 Account

By Attained Age and Years of Service

Attained Age	Years of Service at Termination							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
30-34	-	-	72	-	-	1	-	73
35-39	-	-	209	7	-	-	-	216
40-44	-	-	151	55	8	1	-	215
45-49	-	-	146	44	25	4	-	219
50-54	-	-	168	70	36	20	6	300
55-59	-	-	150	77	44	21	8	300
60-64	-	-	116	25	12	6	5	164
65-69	-	-	17	5	-	2	1	25
70-74	-	-	2	-	1	-	-	3
75-79	-	-	3	1	-	-	-	4
80 & Over	-	-	-	-	-	-	-	-
Totals	-	-	1,034	284	126	55	20	1,519

Average Age: 49.7
Average Service: 14.3

Retired Members: Pre-1996 Account

By Attained Age and Completed Years of Retirement

Attained Age	Years of Retirement							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
30-34	5	7	7	5	3	1	1	29
35-39	2	1	6	2	-	-	-	11
40-44	8	10	5	4	1	-	-	28
45-49	15	22	21	8	2	1	1	70
50-54	115	49	30	15	5	3	1	218
55-59	2,665	247	82	37	31	5	8	3,075
60-64	4,444	2,877	288	69	36	9	5	7,728
65-69	2,245	3,633	1,960	272	52	22	7	8,191
70-74	336	1,826	2,884	971	276	37	22	6,352
75-79	31	357	1,947	2,335	726	259	44	5,699
80-84	8	60	298	1,577	1,775	441	242	4,401
85-89	-	6	47	205	1,124	892	430	2,704
90-94	-	2	10	10	138	667	652	1,479
95-99	2	2	-	-	4	60	418	486
100 & Over	-	-	-	-	-	-	83	83
Totals	9,876	9,099	7,585	5,510	4,173	2,397	1,914	40,554

Average Age: 72.1
Average Years Retired: 12.0

Retired Members: 1996 Account

By Attained Age and Completed Years of Retirement

Attained Age	Years of Retirement							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
20-34	-	2	-	-	-	-	-	2
35-39	2	1	-	-	-	-	-	3
40-44	3	2	-	-	-	-	-	5
45-49	3	6	-	-	-	-	-	9
50-54	28	9	-	-	-	-	-	37
55-59	312	36	3	1	-	-	-	352
60-64	464	300	14	-	-	-	-	778
65-69	268	298	60	2	-	-	-	628
70-74	62	125	86	14	4	-	-	291
75-79	11	22	46	27	3	1	-	110
80-84	2	5	7	13	12	-	-	39
85-89	-	1	1	2	2	1	2	9
90 & Over	-	-	-	-	-	-	-	0
Totals	1,155	807	217	59	21	2	2	2,263

Average Age: 65.1
Average Years Retired: 5.3

Retired Members: Pre-1996 Account

By Year of Retirement

Year of Retirement As of June 30	Number	Monthly Pensions	
		Total	Average
Before 1975	859	\$ 393,809	\$ 458
1975	198	110,982	561
1976	250	144,124	576
1977	260	157,621	606
1978	347	222,065	640
1979	410	258,702	631
1980	471	302,899	643
1981	479	302,654	632
1982	479	312,177	652
1983	558	366,498	657
1984	632	433,116	685
1985	920	669,294	727
1986	749	559,799	747
1987	886	707,339	798
1988	986	839,260	851
1989	810	720,360	889
1990	1,251	1,257,316	1,005
1991	1,210	1,307,835	1,081
1992	1,089	1,212,871	1,114
1993	1,150	1,372,101	1,193
1994	1,279	1,556,210	1,217
1995	1,620	2,048,041	1,264
1996	1,578	2,032,529	1,288
1997	1,381	1,771,091	1,282
1998	1,727	2,200,473	1,274
1999	1,588	2,141,167	1,348
2000	1,836	2,569,653	1,400
2001	1,789	2,590,879	1,448
2002	2,043	3,076,606	1,506
2003	1,843	2,940,762	1,596
2004	2,084	3,369,811	1,627
2005	1,947	3,251,236	1,670
2006	2,253	3,887,498	1,725
2007	2,138	3,694,086	1,728
2008	1,454	2,610,249	1,795
Totals	40,554	\$ 51,391,111	\$ 1,267

Retired Members: 1996 Account

By Year of Retirement

Year of Retirement As of June 30	Number	Monthly Pensions	
		Total	Average
1974	1	\$ 192	\$ 192
1975	1	282	282
1981	1	254	254
1982	1	918	918
1984	1	372	372
1986	3	1,623	541
1987	9	7,265	807
1988	8	6,267	783
1989	7	5,423	775
1990	14	13,618	973
1991	12	9,815	818
1992	13	15,512	1,193
1993	13	13,857	1,066
1994	23	27,574	1,199
1995	30	34,113	1,137
1996	55	68,891	1,253
1997	42	49,270	1,173
1998	67	75,555	1,128
1999	72	89,798	1,247
2000	109	132,282	1,214
2001	171	228,447	1,336
2002	238	362,463	1,523
2003	217	319,312	1,471
2004	312	468,785	1,503
2005	317	537,550	1,696
2006	175	252,468	1,443
2007	191	262,518	1,374
2008	160	276,264	1,727
Totals	2,263	\$ 3,260,687	\$ 1,441

This schedule may include individuals who retired from the Pre-1996 Account, returned to work, and then retired again (from the 1996 Account).

Retired Members

Reconciliation of Benefit Recipients, July 1, 2007 to July 1, 2008

Pre-1996 Account

	Number of Members	Sum of Annual Allowances*
Beginning of Year Rolls	39,328	\$ 658,296,600
Added to Rolls	2,296	52,166,844
Removed from Rolls	(966)	(11,025,463)
Net Transfers to 1996 Account	(104)	(1,762,578)
Benefit Changes		3,479,833
End of Year Rolls	40,554	\$ 701,155,236
Percentage Increase in Annual Allowances		6.51%
Average Annual Allowances		\$ 17,289

1996 Account

	Number of Members	Sum of Annual Allowances*
Beginning of Year Rolls	1,925	\$ 37,012,980
Added to Rolls	255	5,126,028
Removed from Rolls	(21)	(316,275)
Net Transfers to Pre-1996 Account	104	1,762,578
Benefit Changes		(103,335)
End of Year Rolls	2,263	\$ 43,481,976
Percentage Increase in Annual Allowances		17.48%
Average Annual Allowances		\$ 19,214

* Pension plus Annuity

Retired Members

Number of Benefit Recipients by Benefit Option

Pre-1996 Account

Amount of Monthly Benefit*	Option A-1	Option A-2	Option A-3	Option B-1	Option B-2	Option B-3	Survivors	Classroom Disability	Total
\$1-\$500	2,187	1,599	224	899	149	204	555	26	5,843
\$501-\$1,000	2,650	2,611	365	1,557	407	617	371	2	8,580
\$1,001-\$1,500	2,997	2,686	419	3,005	969	1,096	146	0	11,318
\$1,501-\$2,000	2,300	2,130	278	2,707	1,001	1,166	101	0	9,683
\$2,001-\$3,000	1,206	1,068	159	1,226	510	569	28	0	4,766
Over \$3,000	96	80	11	89	46	42	0	0	364
Total	11,436	10,174	1,456	9,483	3,082	3,694	1,201	28	40,554

1996 Account

Amount of Monthly Benefit*	Option A-1	Option A-2	Option A-3	Option B-1	Option B-2	Option B-3	Survivors	Classroom Disability	Total
\$1-\$500	104	75	6	72	9	14	15	0	295
\$501-\$1,000	124	78	23	105	23	31	13	0	397
\$1,001-\$1,500	157	105	24	138	37	46	4	0	511
\$1,501-\$2,000	150	109	16	181	40	62	6	0	564
\$2,001-\$3,000	104	88	14	131	38	52	4	0	431
Over \$3,000	15	16	0	22	6	6	0	0	65
Total	654	471	83	649	153	211	42	0	2,263

* Pension only

Retired Members

Schedule of Average Benefit Payments by Service at Retirement

Pre-1996 Account

	Years of Service at Retirement						Total
	5-9	10-14	15-19	20-24	25-29	30+	
Avg. Monthly Defined Benefit Pension	\$ 584	\$ 253	\$ 456	\$ 715	\$ 1,072	\$ 1,614	\$ 1,267
Avg. Monthly Annuity	\$ 76	\$ 87	\$ 85	\$ 119	\$ 153	\$ 209	\$ 174
Avg. Final Avg. Salary at Retirement	\$ 33,325	\$ 20,644	\$ 30,920	\$ 36,794	\$ 42,478	\$ 48,761	\$ 43,817
Number of Benefit Recipients	62	1,090	3,654	4,901	7,171	23,676	40,554

1996 Account

	Years of Service at Retirement						Total
	5-9	10-14	15-19	20-24	25-29	30+	
Avg. Monthly Defined Benefit Pension	\$ 310	\$ 384	\$ 601	\$ 865	\$ 1,303	\$ 1,944	\$ 1,441
Avg. Monthly Annuity	\$ 31	\$ 65	\$ 73	\$ 119	\$ 153	\$ 205	\$ 160
Avg. Final Avg. Salary at Retirement	\$ 35,582	\$ 36,515	\$ 41,969	\$ 48,138	\$ 54,230	\$ 61,702	\$ 54,752
Number of Benefit Recipients	19	128	287	259	379	1,191	2,263

Closed Group Actuarial Projections

The schedules on the following pages for the Pre-1996 Account were produced by means of an actuarial projection.

Whereas actuarial valuations provide a snapshot of the Retirement Fund as of a given date, actuarial projections provide a moving picture of Retirement Fund activities. The projected active and retired groups are developed from year to year by applying assumptions regarding pre-retirement withdrawal from service, retirements, deaths, and disabilities. Projected information regarding plan activity produces an expected future benefit payment stream.

Projection results are useful in demonstrating changing relationships among key elements affecting system financial activity. For example, the relationship between annual benefits paid and assets will change over time. Projections are not predictions of specific future events and do not provide numeric precision in absolute terms. The future pension benefits shown in the table are estimates. Actual payments will likely differ from the amounts shown; however, understanding the relative growth is critical.

Closed Group Projection: Pre-1996 Account

\$ in Millions

Year Ended June 30	Active Members		Inactive Members	
	Number	Payroll	Number	Pension Benefits Paid
2009	31,373	2,160.8	46,369	667.0
2010	28,388	2,026.9	48,277	725.5
2011	25,577	1,890.8	50,005	781.3
2012	22,934	1,753.2	51,537	838.1
2013	20,480	1,617.9	52,779	894.1
2014	18,262	1,490.3	53,736	945.0
2015	16,247	1,369.1	54,442	993.4
2016	14,418	1,254.0	54,908	1,038.3
2017	12,746	1,143.7	55,169	1,079.7
2018	11,232	1,039.6	55,221	1,116.9
2019	9,879	942.9	55,042	1,149.6
2020	8,666	852.9	54,653	1,177.9
2021	7,579	769.0	54,075	1,202.1
2022	6,602	690.5	53,323	1,222.3
2023	5,728	617.6	52,409	1,238.2
2024	4,942	549.2	51,354	1,249.9
2025	4,226	484.0	50,173	1,257.8
2026	3,579	422.5	48,876	1,261.6
2027	3,002	365.2	47,456	1,261.2
2028	2,505	313.9	45,909	1,255.8
2029	2,080	268.7	44,244	1,245.5
2030	1,715	228.3	42,468	1,230.7
2031	1,406	193.0	40,613	1,210.9
2032	1,143	161.8	38,700	1,186.6
2033	924	135.0	36,753	1,157.3
2034	744	112.1	34,776	1,123.6
2035	595	92.6	32,770	1,086.2
2036	474	76.1	30,747	1,045.3
2037	374	62.1	28,727	1,001.6
2038	293	50.4	26,723	955.5

Note: Projections are intended to demonstrate the pattern of future activities and should not be viewed as a prediction of specific dollar amounts in any year.

Closed Group Projection: Pre-1996 Account (Continued)

\$ in Millions

Year Ended June 30	Active Members		Inactive Members	
	Number	Payroll	Number	Pension Benefits Paid
2039	228	\$ 40.5	24,753	907.5
2040	173	31.8	22,835	858.5
2041	130	24.7	20,979	808.6
2042	97	19.0	19,198	758.4
2043	73	14.8	17,502	708.5
2044	54	11.5	15,899	659.3
2045	40	8.7	14,396	611.3
2046	29	6.5	12,996	564.8
2047	20	4.8	11,698	520.2
2048	14	3.4	10,500	477.5
2049	9	2.4	9,397	436.9
2050	6	1.5	8,386	398.5
2051	4	1.0	7,462	362.2
2052	2	0.6	6,618	328.1
2053	1	0.3	5,851	296.1
2054	1	0.1	5,123	266.2
2055	-	-	4,522	238.3
2056	-	-	3,951	212.4
2057	-	-	3,437	188.5
2058	-	-	2,975	166.4

Note: Projections are intended to demonstrate the pattern of future activities and should not be viewed as a prediction of specific dollar amounts in any year.

Summary of Benefit Provisions

Regular Retirement

Eligibility	Age 65 with ten years service or age 60 with 15 or more years of service or if age is at least 55 and the sum of age plus credited service is 85 or more.
Annual Amount	State pension equal to total service times 1.1% of Average Annual Compensation.

Early Retirement

Eligibility	Age 50 with 15 or more years of service.
Annual Amount	State pension is computed as regular retirement benefit, but reduced for each month between age at early retirement and attainment of age 65. The age reduction factor is calculated as the sum of the following: <ul style="list-style-type: none">• 1/10 of 1% for each month from age 60 to 65.• 5/12 of 1% for each month from age at early retirement to 60.

Deferred Retirement

Eligibility	Ten years of service. Benefit commences at regular or early retirement eligibility.
Annual Amount	Computed as a regular retirement benefit with state pension based on service and Average Annual Compensation at termination.

Disability Retirement

Classroom Disability Benefit:

Eligibility	Five years of service.
Annual Amount	\$125 per month plus \$5 per month for each year of service credit over five years.

Alternative Disability Benefit:

Eligibility	Five years of service and determined to be disabled by the Social Security Administration. Annual verification of Social Security disability is required.
Annual Amount	Computed as a regular retirement benefit using creditable service to the date of disability and without reduction for early retirement. The minimum benefit is \$180 per month.

Summary of Benefit Provisions

Death Before Retirement

Eligibility	15 years of service. Spouse to whom member had been married for two or more years is automatically eligible, or a dependent may be designated as beneficiary.
Annual Amount	Computed as regular retirement benefit but reduced in accordance with a 100% joint and survivor election.

Benefit Increases After Retirement

No automatic increases after retirement are provided. Periodically, unscheduled increases have been made.

Average Annual Compensation

Average of highest five years of compensation. Years do not need to be consecutive.

Member Contributions

All Fund members are required by state law to contribute 3% of salary contributions to their Annuity Savings Account. These 3% contributions are generally "picked up" by the employer and contributed on a pre-tax basis on behalf of the employee. Extra voluntary contributions by the member are also possible, but on a post-tax basis. At retirement, there are six alternatives for receiving the proceeds of this account, including lump sums, full and partial rollovers, full and partial annuitization of the balance, and deferred distribution.

Forms of Benefit Payment (State Pension)

The normal form of benefit payment (Option A-1) is a single life annuity with a five-year certain period. There are five optional forms of payment available, as listed below. Additionally, members retiring between ages 50 and 62 may integrate their pension benefit with their Social Security benefit by choosing Social Security Integration (Option A-4) in conjunction with the normal form or any other optional form selected. Optional forms of payment are calculated on an actuarial equivalent basis.

- Option A-2: Straight Life benefit with no certain period
- Option A-3: Modified Cash Refund Annuity (operates in conjunction with the Annuity Savings Account)
- Option B-1: 100% Survivorship
- Option B-2: 66 2/3% Survivorship
- Option B-3: 50% Survivorship

State law provides for actuarially-adjusted and re-calculated benefits based on a new optional form election in the event of the death of the member's spouse after retirement.

Optional forms of benefit are calculated based on 7.5% interest with a 40%/60% unisex blend of the 1983 Group Annuity Male Mortality table set back three years and the 1983 Group Annuity Male Mortality table set back seven years.

Summary of Actuarial Assumptions and Methods

The assumptions used in this valuation reflect the study of experience covering the period July 1, 2002 through June 30, 2007.

Investment Return Rate	7.5% per year, compounded annually (net after administrative expenses).
Pay Increase Assumption	Sample increases are shown in a table on the following pages. The assumption for each consists of a merit and/or seniority increase, 3.0% for price inflation, and 0.25% for real wage growth.
Total Active Member Payroll	Assumed to annually increase 10% for the 1996 Account and decrease according to the projection in the Payout Projections section for the Pre-1996 Account for purposes of calculating the projected contribution for the 2010 fiscal year.
Price Inflation	3.0% per year. Price inflation is not directly tied to benefits; however, it is a component of the economic model used to determine total wage inflation.
Mortality <i>Healthy</i>	2008 IRS Static Mortality Table projected an additional 5 years (sex specific).
<i>Disabled</i>	2008 IRS Static Mortality Table projected an additional 5 years (sex specific).
Retirement	Probabilities are shown in tables on the following pages.
Withdrawal	Sample probabilities are shown in tables on the following pages.
Disability	Sample probabilities are shown in a table on the following pages.
Actuarial Cost Method	Entry Age Normal (level percent of pay) method, with a 30-year, level dollar amortization of the Unfunded Accrued Liability arising from all sources including actuarial gains and losses.
Asset Valuation Method	The Actuarial Value of Assets recognizes investment gains and losses in equal installments over four years. However, the Actuarial Value is limited to no more than 20% greater than or 20% less than the Market Value of Assets.
Marriage Assumption	100% of members are assumed to be married for purposes of valuing death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing	Beginning of (fiscal) year. Payroll amounts stated in the valuation data are amounts projected to be paid during the current year.
Decrement Timing	Decrements are assumed to occur at the beginning of the year.

Summary of Actuarial Assumptions and Methods

Other	Disability and withdrawal decrements do not operate after member reaches retirement eligibility. Only the withdrawal and death decrements operate during the first ten years of service.
Miscellaneous Adjustments	The calculated liabilities and normal costs were increased by 1% to account for the inclusion of unused sick leave in the calculation of Average Compensation.
Actuarial Equivalence Basis for Optional Forms of Payment	7.5% interest with a 40%/60% unisex blend of the 1983 Group Annuity Male Mortality table set back three years and the 1983 Group Annuity Male Mortality Table set back seven years.
Explicit Expense Load	None.
COLA Assumption	1.5% compounded annually on pension portion.
Employee Census and Asset Data	Census and asset information was furnished as of the valuation date by the Fund's Administrative Staff. Although examined thoroughly for reasonableness and consistency with prior years, the data was not otherwise audited by the Actuary.

The actuarial valuation computations were made under the supervision of a Member of the American Academy of Actuaries (MAAA).

Summary of Actuarial Assumptions and Methods

Probabilities of Age and Service Retirement

Regular Retirement		Rule of 85 Retirement		Early Retirement	
Age	Probability	Age	Probability	Age	Probability
				50-53	0.015
				54	0.030
		55	0.160	55	0.040
		56	0.130	56	0.050
		57	0.135	57	0.060
		58	0.145	58	0.070
		59	0.160	59	0.080
60	0.180	60	0.180		
61	0.220	61	0.220		
62	0.250	62	0.250		
63	0.200	63	0.200		
64	0.250	64	0.250		
65	0.350	65	0.350		
66	0.300	66	0.300		
67	0.200	67	0.200		
68	0.250	68	0.250		
69	0.300	69	0.300		
70	1.0000	70	1.0000		

Probabilities of Disability

Attained Age	Age-Based	
	Male	Female
25	0.0001	0.0001
30	0.0001	0.0001
35	0.0001	0.0001
40	0.0001	0.0001
45	0.0002	0.0002
50	0.0005	0.0005
55	0.0009	0.0009
60	0.0010	0.0010

Summary of Actuarial Assumptions and Methods

Probabilities of Withdrawal

Years of Service	Service-Based	
	Male	Female
0	0.3500	0.3500
1	0.1400	0.1500
2	0.1000	0.1200
3	0.0800	0.0950
4	0.0600	0.0850
5	0.0500	0.0750
6	0.0450	0.0650
7	0.0400	0.0550
8	0.0350	0.0500
9	0.0300	0.0450

Attained Age	Age-Based*	
	Male	Female
25	0.0250	0.0400
30	0.0250	0.0400
35	0.0230	0.0340
40	0.0180	0.0200
45	0.0130	0.0150
50	0.0350	0.0350
55	0.0350	0.0350
60	0.0350	0.0350

*Age-Based rates apply only if 10 or more years of service.

Summary of Actuarial Assumptions and Methods

Pay Increase Assumption

Years of Service	Merit & Seniority	Base (Economic)	Total
1	9.25%	3.25%	12.50%
5	4.50%	3.25%	7.75%
10	3.25%	3.25%	6.50%
15	2.00%	3.25%	5.25%
20	0.75%	3.25%	4.00%
25	0.25%	3.25%	3.50%
30	0.25%	3.25%	3.50%
35	0.25%	3.25%	3.50%
40	0.25%	3.25%	3.50%

Definitions of Technical Terms

Accrued Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Accrued Liability	The difference between the actuarial present value of future benefit payments and the actuarial present value of future normal costs. Also referred to as “actuarial accrued liability” or “past service liability”.
Actuarial Assumptions	Estimates of expected future experience with respect to rates of mortality, disability, turnover, retirement, rate of investment return, and pay increases. Decrement assumptions (rates of mortality, disability, turnover, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (pay increases and investment return) consist of the underlying rates in an inflation-free environment plus a provision for a long-term average rate of inflation.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future benefit payments” between future normal costs and actuarial accrued liabilities. Sometimes referred to as the “actuarial funding method”.
Actuarial Equivalent	One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.
Actuarial Gain (Loss)	The difference between actual unfunded actuarial accrued liability and anticipated unfunded actuarial accrued liability — during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.
Actuarial Present Value	The single amount now that is equal to a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.
Amortization	Paying off a present value with periodic payments.
Normal Cost	The portion of the actuarial present value of future benefits that is assigned to the current year by the actuarial cost method. Sometimes referred to as “current cost”.
Unfunded Accrued Liability	The difference between the accrued liability and the actuarial value of assets. Sometimes referred to as “unfunded past service liability” or “unfunded actuarial accrued liability” or simply as “unfunded liability”.

The Actuarial Valuation Process

The **actuarial valuation** is the mathematical process by which a contribution rate is determined. The flow of activity constituting the valuation may be summarized as follows:

- A. Covered Person Data:** Furnished by the Plan Administrator
 - Retired Members and Beneficiaries Now Receiving Benefits
 - Former Employees with Vested Benefits Not Yet Payable
 - Active Members

- B. + Asset Data (Cash and Investments):** Furnished by the Plan Administrator

- C. + Estimates of Future Experience (Actuarial Assumptions):** Established by the Board of Trustees after Consulting with the Actuary

- D. + Funding Method:** The Allocation of Employer Costs to Past Service, Current Service, and Future Service

- E. + Mathematically Combining the Assumptions, the Funding Method, and the Data**

- F. = Determination of:**
 - Plan Funded Status and Employer Contribution Rate

Funding Objective

The funding objective of the ISTRF 1996 Account is to establish and receive contributions that, when invested at the assumed rate of return, will ultimately accumulate assets over each member's working lifetime that will be sufficient to pay expected retirement allowances.

Fund Structure and Funding Arrangements

The Indiana State Teachers' Retirement Fund (ISTRF) is comprised of a two-account structure in compliance with Indiana Code Section 21-6.1-2-2:

- The **Pre-1996 Account** consists of those members who were hired prior to July 1, 1995, and who have maintained continuous employment with the same school corporation or covered institution since that date.
- The **1996 Account** consists of those members who were:
 - a. hired on or after July 1, 1995 or
 - b. hired before July 1, 1995 and prior to June 30, 2005, and subsequently served in a position covered by ISTRF were either hired by another school corporation or institution covered by ISTRF, or were re-hired by a covered prior employer.

Characteristics of the Pre-1996 Account

1. Active membership in the Pre-1996 Account continues to decline as members quit, become disabled, die, retire, or incur a change in status as described in (b) above, thereby automatically transferring to membership in the 1996 Account.
2. The pension benefits from the Pre-1996 Account are funded by State appropriations (including short-term contributions of some revenue from the State Lottery). Annuity benefits payable from the Pre-1996 Account are funded by the annuitization of Pre-1996 Account member contributions at the time of retirement.

Characteristics of the 1996 Account

1. If the 1996 Account were a stand-alone plan, a normal pattern of departures and hirings would produce a fairly constant population size. However, overall active membership in the 1996 Account is expected to increase over time due to the following factors:
 - a. As Pre-1996 Account members depart from active service, their replacements will become members of the 1996 Account; and
 - b. The special provisions of Indiana Code Section 21-6.1-2-2 require that any member who changed jobs within the System or who was re-hired within the System during the period July 1, 1995 - June 30, 2005 after a period of absence were moved to the 1996 Account..
2. Pension benefits payable from the 1996 Account are funded by contributions from local school corporations or other institutions that employ covered members. Annuity benefits payable from the 1996 Account are funded by the annuitization of 1996 Account member contributions at the time of retirement.

Plan Structures and Funding Arrangements

Funding Arrangements

Prior to the legislation that established the two-account structure in ISTRF, the pension benefits of the Indiana State Teachers' Retirement System were funded on a pay-as-you-go system. Under this arrangement, amounts were appropriated to meet the current year's pension payment requirements. Pension benefits payable from the Pre-1996 Account continue to be funded on this basis. In 1995, the Pension Stabilization Fund was set up for the Pre-1996 Account.

Since then, some pre-funding progress has been made via State appropriations to this Account. Pension benefits payable from the 1996 Account are funded through percent-of-pay contributions. The Teachers' Retirement Board sets this contribution rate after reviewing the most recent actuarial valuation report. The contribution rate for fiscal 2010 of 7.00% was set by the Board in fiscal 2009.

July 21, 2009

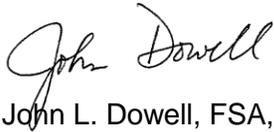
Ms. Julia A. Pogue
Chief Financial Officer
Indiana State Teachers' Retirement Fund
150 West Market Street, Suite 300
Indianapolis, IN 46204-2809

Dear Julia:

Enclosed are 12 copies of the actuarial valuation of active and inactive members and retired lives of ISTRF as of June 30, 2008.

Sincerely,

Nyhart

A handwritten signature in cursive script that reads "John Dowell".

John L. Dowell, FSA, EA, MAAA

/lmw
222-1

Enclosures

cc: Michael Zurek